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AMSAT NEWS SERVICE
ANS-319

The AMSAT News Service bulletins are a free, weekly news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS publishes news related to Amateur Radio in Space including reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

The news feed on http://www.amsat.org publishes news of Amateur Radio in Space as soon as our volunteers can post it.

Please send any amateur satellite news or reports to:
ans-editor at amsat.org.

In this edition:

* EO-79 CubeSat Update
* QB50 Frequency Table
* Newsline Interview With ISS First School Contact Teacher
* Signal Reports Requested From IO-86 FM Transponder Test
* ARISS Contact Featured in ARRL Radio Waves Newsletter
* McMurdo completes MEOSAR satellite ground station in New Zealand

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ANS-319 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 319.01
  From AMSAT HQ Kensington, MD.
November 15, 2015
To All RADIO AMATEURS
BID: $ANS-319.01

EO-79 CubeSat Update

Wouter Weggelaar PA3WEG has provided this update on the status and plans for QB50p1 – EO-79.

Earlier testing campaigns indicate that the AMSAT-UK/AMSAT-NL transponder on board of this spacecraft is in good health. We have activated the transponder on
various occasions for testing purposes.

At the moment we believe the power system is capable of sustaining transponder
operations indefinitely. ISIS (the satellite designer and operator) still needs
to write and apply a software patch that would keep the transponder running. The
current logic in the satellite will switch off the transponder if a reset occurs
of the On Board Computer or power system.

Efforts are being made to allow usage of the transponder in the mean time and

also allow select command stations to take the satellite out of safe mode if it
does reset. ISIS will continue to monitor all telemetry and the satellites health.

The precursor satellites have gathered valuable data about the sensor payloads,
and the lessons learnt are being implemented in the flight units for the QB50
main mission.

We will still have to wait until procedures are in place and the activation is
cleared by the operator and owners of the satellite, but we are nearly ready for
the activation of another transponder!

Transponder activations will be announced on the AMSAT Bulletin Board.

On behalf of AMSAT-NL and the ISIS operations team I would like to thank the community for supporting our mission and thank you for your patience.

[ANS thanks Wouter, PA3WEG, for the above information]

QB50 Frequency Table

Here is a link worth keeping an eye on as the QB50 launch in 2016 gets closer. JE9PEL has a page documenting the frequencies of the 50 cubesats at:

http://www.ne.jp/asahi/hamradio/je9pel/qb50sats.htm

[ANS thanks Mineo Wakita, JE9PEL, for the above information]

Newsline Interview With ISS First School Contact Teacher

This week’s Amateur Radio Newsline Report 1985 November 13, 2015 includes an interview with Rita Wright, KC9CDL, the science teacher who was lucky enough to
help her students be chosen to talk with ISS astronaut William M. “Shep” Shepherd, KD5GSL, for the first school contact with the International Space Station.

Amateur Radio Newsline has this week’s bulletins posted at:

http://www.arnewsline.org/news/2015/11/13/amateur-radio-newsline-report-1985-november-13-2015.html

Select ‘Script’ or ‘Audio’ to access the newscast as desired.

[ANS thanks the Amateur Radio Newsline for the above information]

Signal Reports Requested From IO-86 FM Transponder Test

The FM transponder aboard IO-86/LAPAN-ORARI was activated for testing, and was
available for amateur radio use on 14 November 2015 between 01:35 UTC - 03:40
UTC. This satellite is in a 6° inclination orbit so only stations in equatorial
regions have access. Station in far southern United States may have access.

+ Uplink: 145.880Mhz with 88.5 Hz tone
+ Downlink: 435.880 Mhz

If you heard IO-86 or had any contacts please e-mail signal reports to
yd1eee(a)gmail.com

The two-line Keplerian elements are:

IO-86
1 40931U 15052B   15316.15776324 .00001070 00000-0 60618-4 0 9994
2 40931   6.0030 69.3893 0012877 275.6206 84.2533 14.76374433 6653

These are also included in the keps download available from www.amsat.org

[ANS thanks Dirgantara Rahadian. YE0EEE for the above information]

ARISS Contact Featured in ARRL Radio Waves Newsletter

The American Radio Relay League's Fall 2015 issue of "Radio Waves", a newsletter
for teachers, license instructors, and radio science education features coverage
of the ARISS contact with Tulsa Community College. The PDF issue can be accessed
at:
http://www.arrl.org/radio-waves

[ANS thanks the ARRL for the above information]

McMurdo completes MEOSAR satellite ground station in New Zealand

The legacy of AMSAT OSCAR 6 & 7 in demonstrating satellite based Doppler
location of ground transmitters for search-and-rescue operations in the 1970s
set the stage for the Cospas-Sarsat system which is now entering into the next
stage of evolution.

McMurdo's next-generation MEOSAR satellite ground station system installation in
New Zealand will reduce rescue times in one of the world's most active search
and rescue regions.

McMurdo has announced that it has completed the installation of a six-antenna

next-generation Medium-Earth Orbit Search and Rescue (MEOSAR) satellite ground
station system in New Zealand.

The project, which is part of a joint initiative with Maritime New Zealand and
the Australian Maritime Safety Authority, is expected to significantly boost
search and rescue capability in the New Zealand and Australia search regions and
marks the first implementation of MEOSAR in Asia Pacific. MEOSAR is the next-
generation version of Cospas-Sarsat, the international search and rescue
satellite system that has helped to save 37,000 lives since 1982.

In a typical satellite-based search and rescue scenario, ships, aircraft or
individuals transmit distress signals from an emergency location beacon via
satellite to a fixed ground receiving station or local user terminal. The ground
station receives and calculates the location of the distress signal and creates
and sends an alert to the appropriate rescue authorities.

Today, the beacon-to-alert process depends on a limited number of Low Earth
Orbit (LEO) satellites and may take several hours before a position is
confirmed. With MEOSAR, beacon signals will be received more quickly and beacon
locations identified with greater accuracy thereby reducing this time to
minutes.

The New Zealand MEOSAR system, and another being installed in Western Australia,
will cover one of the largest search and rescue areas in the world - from north
of Australia/New Zealand to the Equator and south to the South Pole, east to
half way across the Pacific, and west half way across the Indian Ocean. The
systems will undergo rigorous testing before being officially brought online in
late 2017 by Cospas-Sarsat.

[ANS thanks SpaceDaily for the above information]

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In addition to regular membership, AMSAT offers membership in the
President's Club. Members of the President's Club, as sustaining
donors to AMSAT Project Funds, will be eligible to receive addi-
tional benefits. Application forms are available from the AMSAT
Office.

Primary and secondary school students are eligible for membership
at one-half the standard yearly rate. Post-secondary school students
enrolled in at least half time status shall be eligible for the stu-
dent rate for a maximum of 6 post-secondary years in this status.
Contact Martha at the AMSAT Office for additional student membership
information.

73,
This week's ANS Editor,
Lee McLamb, KU4OS
ku4os at amsat dot org